

METHOD AND APPARATUS FOR FABRICATING
A SEMICONDUCTOR DEVICE

ABSTRACT OF THE DISCLOSURE

5 The present invention relates to a method and apparatus for depositing a metal layer inducing crystallization of an amorphous silicon layer in order to fabricate a semiconductor device including a crystalline active layer. Since the metal layer inducing a low temperature crystallization of silicon is deposited while heating the substrate, the metal layer contacting the amorphous silicon forms a metal silicide during the deposition process and the other portions of the metal layer remain in the state of metal. Thus, the non-silicide portion of the metal layer may be selectively removed after deposition and the silicide portion of the metal layer has a high 10 resistance against oxidation.

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